Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) An axial divergent section slot nozzle for an engine comprising:

a plurality of spaced apart divergent flaps;

means for moving said divergent flaps;

a bridge member positioned intermediate adjacent ones of said divergent flaps;

each said bridge member including a bridge bracket and a sealing element joined to said bridge bracket;

said sealing element having an upper surface; and

said bridge bracket having a lower surface which has a center point and end tips and which lower surface has a first portion extending from said center portion to a first one of said end tips which diverges from said upper surface of said sealing element and a second portion extending from said center point to a second one of said end tips which diverges from said upper surface of said sealing element.

2. (original) An axial divergent section slot nozzle according to claim 1, wherein said divergent flaps move

relative to said lower surface so that in an overexpanded condition of said nozzle having a first nozzle throat area, a first slot is created between said upper surface of said sealing member and lower surfaces of said flaps.

3. (original) An axial divergent section slot nozzle according to claim 2, wherein said divergent flaps move relative to said lower surfaces so that in an overexpanded condition of said nozzle having a second nozzle throat area smaller than said first nozzle throat area, a second slot smaller than said first slot is created between said upper surface of said seal member and said lower surfaces of said flaps.

4. (original) An axial divergent section slot nozzle according to claim 1, further comprising means for joining said sealing element to said bridge bracket.

5. (original) An axial divergent section slot nozzle according to claim 1, wherein said bridge bracket is shaped to allow variable slot size depending on nozzle throat jet area.

6. (original) An axial divergent section slot nozzle according to claim 1, further comprising a plurality of said divergent flaps defining a nozzle surface area and said flaps being spaced apart by gaps which comprise from 3.0% to 30% of said nozzle throat surface area.

7. (original) An axial divergent section slot nozzle according to claim 6, wherein said divergent flaps are spaced apart by gaps which comprise from 8.0% to 12.0% of said nozzle throat surface area.

8. (currently amended) An ejector nozzle bridge member comprising:

a bridge bracket:

a sealing element joined to said bridge bracket;

said sealing element having an upper surface; and

said bridge bracket having a lower surface which has a center point and end tips and which lower surface has a first portion extending from said center portion to a first one of said end tips which first portion diverges from said upper surface of said sealing element and a second portion extending from said center point to a second one of said end tips which second portion diverges from said upper

surface of said sealing element, said first portion being joined to said second portion at said center point.

9. (original) An ejector nozzle bridge member according to claim 8, further comprising said sealing element having a central portion and end portions at an angle to said central portion.

10. (original) An ejector nozzle bridge member according to claim 8, further comprising:

a backbone support attached to said sealing element;

said bridge bracket fitting over said backbone support; and

means for securing said bridge bracket on said backbone support.

11. (original) An ejector nozzle bridge member according to claim 8, wherein said bridge bracket has a shape which allows variable slot size depending on nozzle throat jet area.

12. (original) A method for tailoring an exhaust plume of an engine, said method comprising the steps of:

providing an engine with a nozzle having movable flaps which create a divergent zone;

providing a bridge member between adjacent ones of said flaps;

operating said engine and said flaps so as to create an overexpanded condition within said nozzle; and

positioning said flaps so as to tailor an exhaust plume from said nozzle to have a flow evenly distributed circumferentially.

13. (original) A method according to claim 12, wherein said flap positioning step comprises moving adjacent ones of said flaps relative to said bridge member so as to create slots which allow ambient air to flow into said exhaust nozzle.

14. (original) A method according to claim 12, wherein said engine operating step comprises creating said overexpanded condition while said engine and said nozzle is operating in a STOVL condition.

15. (original) A method according to claim 12, wherein said flap positioning step comprises positioning said flaps so that gaps are created between adjacent ones of said flaps

which occupy from 3.0% to 30% of a surface area of said nozzle.

16. (original) A method according to claim 12, wherein said flap positioning step comprises positioning said flaps so that gaps are created between adjacent ones of said flaps which occupy from 8.0% to 12% of a surface area of said nozzle.

17. (original) A method according to claim 12, wherein a bridge member providing step comprises providing a bridge member having a sealing element and a bridge bracket having lower surfaces which diverge away from an upper surface of said sealing element.

18. (original) A method according to claim 17, wherein said bridge member providing step further comprises providing a bridge bracket having a diamond wedge shape.

19. (original) A method for increasing the thrust produced by an axial divergent section slot nozzle comprising the steps of:

providing a nozzle having a plurality of spaced apart divergent flaps;

providing a plurality of bridge members having sealing elements which close a gap between adjacent ones of said divergent flaps; and

operating said gaps by operating said nozzle in an overexpanded condition and thereby creating a pressure gradient which allows ambient air surrounding said nozzle to flow into said nozzle.

20. (original) A method according to claim 19, wherein said bridge member providing step comprises providing a plurality of bridge members each having a sealing element which contacts a gas side of a pair of said flaps and a bridge bracket positioned on an air side of said flaps joined to said sealing element.

21. (original) A method according to claim 20, wherein said bridge providing step further comprises providing a bridge bracket shaped to allow variable slot size depending on nozzle throat jet area.

22. (original) A method according to claim 19, wherein said opening step comprises creating a pressure differential which causes each said sealing element to lose contact with said adjacent ones of said divergent flaps.